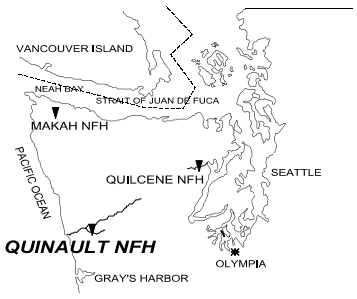
QUINAULT NATIONAL FISH HATCHERY
Humptulips, Washington

INTRODUCTION

The Western Washington Fish and Wildlife Office (WWFWO) and the Olympia Fish Health Center (OFHC) assist the three National Fish Hatcheries (NFH) on the Olympic Peninsula -- Makah, Quilcene, and Quinault (see locale map below). The WWFWO, OFHC, and NFHs work together to restore salmon for domestic and international fisheries in compliance with Trust responsibilities to tribes, court orders, agreements with states, and international treaties. WWFWO works with cooperators to program and evaluate hatchery production to assure obligations are met with minimal impact on wild fish. OFHC provides fish health diagnostic and treatment services to assure optimum post-release survival of hatchery fish.

This annual report provides basic information on Quinault NFH to inform Service employees, visitors, and our cooperators of their hatchery programs.



Western Washington locale map

Quinault NFH, located within the Quinault Indian Reservation on the Olympic Peninsula, began operating in 1968. Its general goals include rebuilding salmon and steelhead runs along the coast of Washington and contributing to current and future fisheries. Specific objectives to meet these goals vary by species and are described on the following pages.

QUICK REFERENCE DATA

LEGEND:	AVG	=	Average (mean)
	BY	=	Brood Year
	FL	=	Fork Length
	CHS	=	Chum Salmon
	COS	=	Coho Salmon
	FCS	=	Fall Chinook Salmon
	WST	=	Winter Steelhead
	♀	=	Female
	♂	=	Male

▸ ADULT AGES AT RETURN

	AGE RANGE	2002 AVG. AGE	1991-2002 AVG. AGE
FCS	2-6 yrs.	4.0	4.3
COS	2-3 yrs.	3.0	2.9
CHS	3-5 yrs.	4.0	3.8
WST	3-5 yrs.	3.4	3.4

▸ ADULT FORK LENGTHS in millimeters (inches)

	FL RANGE	FL MEAN
FCS	340-1300mm (13-51")	846mm (33")
COS	303-827mm (12-32")	584mm (23")
CHS	564-874mm (22-34")	726mm (28")
WST	206-930mm (8-36")	708mm (27")

▸ ADULT ENTRY DATES TO HATCHERY

	1992-2002 RANGE	MEAN ENTRY DATE
FCS	Sep - Dec	November 6
COS	Sep - Feb	October 29
CHS	Oct - Dec	November 10
WST	Sep - Mar	December 14

▸ NUMBER AND DATES OF ADULTS SPAWNED

	2002 Date Range	2002 # Spawned ♂	♀	Total	1986-2002 Avg # Spawned
FCS	10/31-11/14	6	3	9	85
COS	10/17-12/04	496	585	1081	1220
CHS	10/09-12/04	1018	1034	2052	870
WST	11/14-02/13	257	255	512	846

Please direct questions, comments, and suggestions to:

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510 Desmond Drive SE, Suite 102
Lacey, WA 98503-1273
(360) 753-9440

Quinault National Fish Hatchery
3 Sockeye Road
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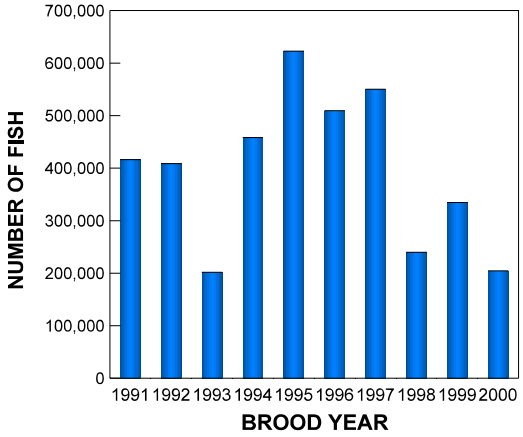
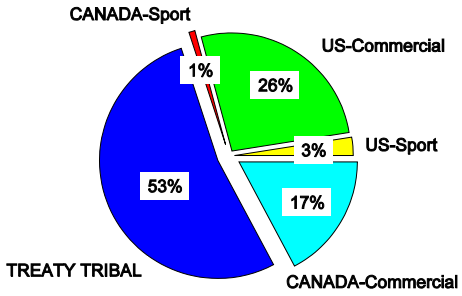
(360) 288-2508

FALL CHINOOK SALMON

FALL CHINOOK RELEASES
(Brood Years 1992 - 2001)



CATCH OF FALL CHINOOK
(Brood Years 1984-1998)



OBJECTIVE: Restore fall chinook population and support coastal chinook fisheries.

RELEASES: Program goal is to release 600,000 subyearlings into Cook Creek, a tributary of the Quinault River, at the hatchery.

CATCH: Over 5,000 Quinault NFH adult chinook are caught in U.S. and Canadian waters each year, of which approximately 2,000 are caught in the Quinault River system. Hatchery production accounts for about one-fourth of the total catch in the river.

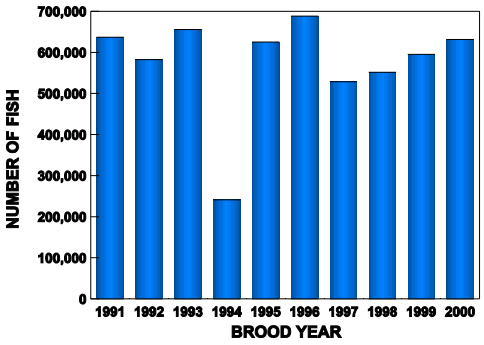
FCS PROCESSED AT HATCHERY RACK BY RETURN YEAR

	Age at Return					Total
Return Year	2	3	4	5	6	per Year
1993	2	5	52	93	2	154
1994	9	13	101	166	7	296
1995	1	35	31	78	2	147
1996	3	7	55	25	5	95
1997	2	32	93	38	3	168
1998	1	6	19	34	1	61
1999	0	7	42	30	0	79
2000	0	2	28	13	0	43
2001	4	2	26	8	0	40
2002	0	0	9	0	0	9

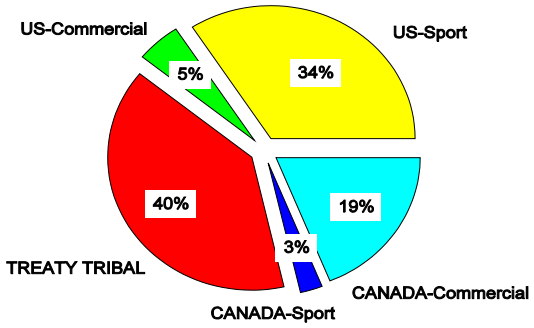
The FCS program is augmented by a successful Quinault Lake broodstock capture program. Increased production is not desired because of considerable natural production in Cook Creek and the Quinault River. Total fishery harvest and hatchery return averages 1 percent of releases.

COHO SALMON

COHO RELEASES
(Brood Years 1991 - 2000)



CATCH OF COHO
(Brood Years 1988-1998)



OBJECTIVE: Restore coho populations and provide fish for coastwide fisheries.

RELEASES: The program goal is to release 660,000 yearlings annually into Cook Creek.

CATCH: Over 12,000 adults are caught coastwide or return to the hatchery.

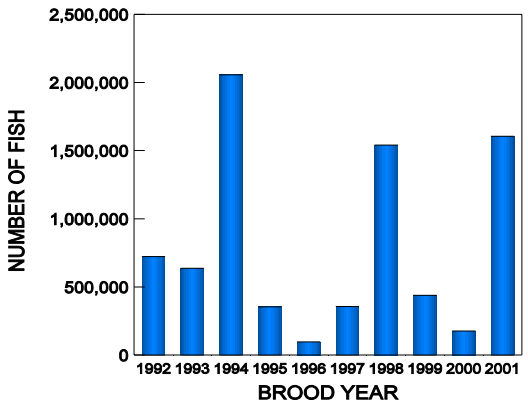
COHO RETURNS TO HATCHERY RACK BY RETURN YEAR

	Age at Return		
Return Year	2	3	Total per Year
1992	480	3,436	3,916
1993	55	1,573	1,628
1994	115	331	446
1995	411	3,885	4,296
1996	109	6,446	6,555
1997	167	698	865
1998	844	2,526	3,370
1999	1,461	11,550	13,011
2000	2,413	7,550	9,963
2001	240	24,551	24,791
2002	374	13,473	13,847

The number of adult returns indicates a successful coho program. Total survival rate averages 2.3 percent. Additional coded-wire tagging was initiated in the fall/winter of 1997-98 to evaluate the effects of selective fisheries. A 4-year density study was begun in 2000 to determine the effects of three production levels on adult survival rates.

CHUM SALMON

CHUM RELEASES
(Brood Years 1992 - 2001)



CATCH OF CHUM
(1989 - 2000)

Calendar Year	Number Caught Quinault River
1991	2,564
1992	2,571
1993	5,258
1994	1,452
1995	690
1996	595
1997	1,037
1998	4,727
1999	594
2000	754
2001	2,005
2002	1,178

OBJECTIVE: Restore chum populations and provide fish to fisheries. The chum program is managed as a composite hatchery/natural program, since many fish spawn in Cook Creek below the hatchery and in the Quinault River.

RELEASES: An average of 808,000 hatchery fry are released at the hatchery into Cook Creek.

CATCH: The Quinault River yields an average catch of 1,950 chum (hatchery/natural composite).

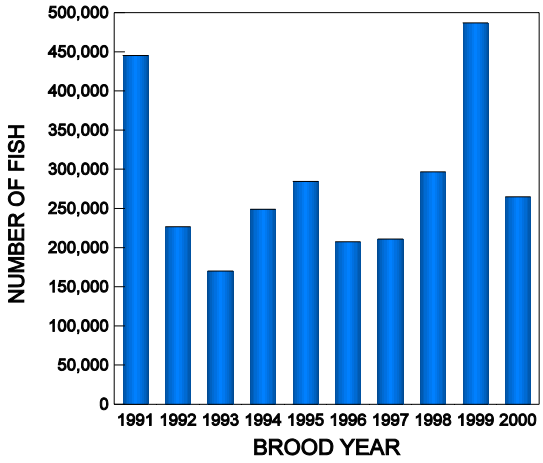
CHUM RETURNS TO HATCHERY RACK BY RETURN YEAR

	Age at Return				Total
Return Year	3	4	5	6	per Year
1993	127	660	22	0	809
1994	42	1,619	433	0	2,094
1995	22	266	178	19	466
1996	55	47	25	0	127
1997	365	207	5	0	577
1998	10	2,464	19	0	2,493
1999	37	170	303	0	509
2000	115	93	11	0	219
2001	1922	949	25	0	2,896
2002	347	2,275	405	0	3,082

Cook Creek supports significant natural production.
Hatchery production exists solely from adults returning to the hatchery.

WINTER STEELHEAD

WINTER STEELHEAD RELEASES
(Brood Years 1991 - 2000)



CATCH OF WINTER STEELHEAD
(1991 - 2002)

Catch Year	Number Caught Quinault River
1991-92	1,309
1992-93	3,989
1993-94	1,127
1994-95	1,018
1995-96	2,907
1996-97	2,171
1997-98	1,442
1998-99	2,484
1999-00	720
2000-01	2,585
2001-02	2,384
2002-03	1,433

OBJECTIVE: Restore steelhead populations and provide fish to tribal and sport fisheries.

RELEASES: Quinault NFH releases an average of 230,000 yearlings at the hatchery, plants 50,000 yearlings in the Hoh River, and transfers 50,000 subyearlings to the Hoh Tribe.

CATCH: An average of 2,680 hatchery fish are caught in the Quinault River system. Catches are composed of NFH and Quinault Lake tribal hatchery production.

WST RETURNS TO HATCHERY RACK BY RETURN YEAR

	Age at Return				Total
Return Year	2	3	4	5	per Year
1993-94	0	96	491	0	587
1994-95	1	1,551	480	29	2,061
1995-96	4	2,399	612	6	3,021
1996-97	3	1,562	1,138	0	2,703
1997-98	2	1,020	1,206	0	2,228
1998-99	1	2,061	901	0	2,963
1999-00	0	1,004	582	0	1,586
2000-01	2	1,233	1,377	0	2,612
2001-02	0	6,166	2,066	0	8,232
2002-03	4	1,288	864	8	2,164

The number of adult returns indicates a successful program.
Total survival rate averages 1.8 percent.